



UNITED STATES PATENT AND TRADEMARK OFFICE

54

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/536,686	03/28/2000	Yoshiko Sakagawa	48864-026	5237
20277	7590	06/02/2005		EXAMINER
MCDERMOTT WILL & EMERY LLP 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096			DASTOURI, MEHRDAD	
			ART UNIT	PAPER NUMBER
			2623	

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/536,686	SAKAGAWA ET AL.
	Examiner	Art Unit
	Mehrdad Dastouri	2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on December 29, 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-9 and 17-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-9 and 17-23 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date: _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicants' amendment filed December 29, 2004, has been entered and made of record.
2. Objection to Claim 1 has been withdrawn in view of Applicants' amendment.

Response to Arguments

3. Applicant's arguments filed December 29, 2004, have been fully considered but they are not persuasive.

Applicants argue in essence that prior arts of record (Yano and Arakawa) do not disclose changing a posture of the image as the three dimensional data for specifying unmeasured portions.

The Examiner disagrees and indicates that Yano discloses this limitation as depicted in Figure 1. As shown in Figure 1, a user inputs an image by scanning the camera 2 around an object 3 to be measured. The scanning occurs in the direction of arrow a. By moving camera 2 around an object 3, the posture of object 3 will be changed and three-dimensional data of all portions of the object will be obtained.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-9 and 17-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yano et al. (US 6,031,941) in view of Arakawa et al. (US 5,822,450).

Regarding claim 1, Yano et al. ("Yano") discloses a 3-D data input method including generating image data of a 3-D shape model in accordance with the 3-D data inputted from a part of the object, the image corresponding to the shape of the 3-D data (Figure 5, element 55; Col. 3, lines 63-67, Col. 4, lines 1-20);

changing a posture of the image as the three-dimensional data for specifying unmeasured portions (Figure 1; Column 3, Lines 38-44). Yano further discloses displaying on the monitor screen the image of the 3-D shape model (Figure 3; Col. 4, lines 21-37). Yano discloses inputting images while monitoring the displayed 3-D shape of the object to be measured (Col. 11, lines 65-67, Col. 12, lines 1-5), thereby suggesting displaying the 3-D shape model as a guide image in order to ensure overlapping portions for subsequent shooting. Yano discloses performing a framing 32 of an image of the object that corresponds to the guide image while simultaneously monitoring the guide image 33 (Col. 3, lines 62-67, Col. 4, lines 1-37; Col. 11, lines 65-67, Col. 12, lines 1-5) and shooting the object after the framing is performed (Col. 7, lines 58-64).

Yano does not disclose performing framing so that the guide image is overlapped on an image of the object. However, one of ordinary skill in the art would have expected Applicant's invention to perform equally well with either the guide image taught by Yano or the claimed overlapping of the guide image and an image of the

object because both perform the same function of confirming that the desired 3-D data is obtained including overlapping portions to allow image synthesis processing.

Furthermore, Arakawa et al. ("Arakawa") teaches that it is well known generate image data of a 3-D shape model (Col. 8, lines 50-61) and overlap the 3-D shape model with an image of the object that corresponds to the 3-D shape model (Col. 7, 58-67, Col. 8, lines 1-14). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the guide image disclosed by Yano to include overlapping the guide image. The motivation for doing so would have been to facilitate the correspondence relationship between the 3-D guide image and the 2-D image corresponding to the 3-D guide image. Therefore, it would have been obvious to combine Yano with Arakawa to obtain the invention as specified in claim 1.

Regarding claim 2, the arguments analogous to those presented above for claim 1 are applicable to claim 2.

Regarding claim 3, Yano discloses a memory 14 for memorizing the 3-D data of the object obtained by the shooting (Figure 2).

Regarding claim 4, Yano discloses the image generator generates the 3-D model image in accordance with the data memorized in the memory (Col. 6, lines 57-67 and Col. 7, lines 1-4).

Regarding claim 5, the arguments analogous to those presented above for claim 1 are applicable to claim 5.

Regarding claim 6, Yano does not appear to recognize matching the image of the input portion with the guide image so that the scale of the guide image agrees with the

scale of the object. However, Arakawa teaches that it is known to match the image of the input portion with the guide image so that the scales agree (Col. 8, lines 1-21).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the guiding disclosed by Yano to include the matching as taught by Arakawa because it will facilitate positioning of the object

Regarding claim 7, Yano discloses the shooting performed for plural positions different from each other (Col. 4, lines 8-13).

Regarding claim 8, Yano discloses the image of the 3-D shape model is retrieved from the memory (Fig. 8, memory 552; Col. 14, lines 15-20).

Regarding claim 9, Yano discloses the plurality of the image of 3-D shape model is memorized (Abstract; Col. 6, lines 57-67 and Col. 7, lines 1-4).

Regarding claims 17 and 20, the arguments analogous to those presented above for claim 1 are applicable to claims 17 and 20. Yano discloses memorizing attribute information in a memory, the attribute information being about data of a 3-D shape model having a shape that is substantially the same as the shape of the object (Col. 6, lines 57-67, Col. 7, lines 1-4) and a position for observing the 3-D shape model (Figure 3).

Regarding claims 18 and 19, the arguments analogous to those presented above for claims 6 and 7 are applicable to claims 18 and 19, respectively.

Regarding claim 21, the arguments analogous to those presented above for claim 6 are applicable to claim 21.

Regarding claims 22 and 23, the arguments analogous to those presented above for claims 3 and 4 are applicable to claims 22 and 23, respectively.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mehrdad Dastouri whose telephone number is (571) 272-7418. The examiner can normally be reached on Monday to Friday from 8:00 a.m. to 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on (571) 272-7414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mehrdad Dastouri
Primary Examiner
Art Unit 2623
May 29, 2005

MEHRDAD DASTOURI
PRIMARY EXAMINER

Mehrdad Dastouri